
South College Station Thoroughfare Plan Update

The purpose of this report is to document considerations taken by staff to develop the accompanying draft of the South College Station Thoroughfare Plan Update map. As presented to the Planning & Zoning Commission's Thoroughfare Plan Update Subcommittee, a number of land use changes have materialized or are anticipated in the study area precipitating this revision.

The College Station Comprehensive Plan (1997) is the steering document for this effort providing the framework for this process. The proposals contained in this update are considered long term, that is, implemented through a combination of private and public sector efforts over a 20-25 year period. Private sector effort refers to implementation activities associated with land and thoroughfare development by the private sector. Public sector effort refers to implementation activities associated with public investment prioritized under the Capital Improvement Program (CIP).

The Study Area is in the southern portion of College Station. It is generally described as that area lying south of the proposed SH 40 alignment between SH 6 and Wellborn Road (FM 2154) within the City's extra territorial jurisdiction (ETJ).

Land Use Patterns

The first consideration for the update of the thoroughfare plan was the current comprehensive land use plan. The basis for the Comprehensive Land Use Plan was developed concurrently with the Comprehensive Plan in 1997 by a consultant, HOK. The type of land uses that are existing or planned for an area drive the trip generation and access needs for that area. As discussed in the initial meeting of the subcommittee, substantial changes are taking place in the study area primarily in the form of residential development at various densities in the City and the ETJ. Land is being subdivided at a rapid rate with long term implications for thoroughfare development both in the City and in the ETJ. Currently the land use plan shows single-family residential (medium density) development north of the proposed SH 40. This projected land use type also extends along the southern fringes of SH 40, in the Castlegate area as well as areas surrounding Nantucket. Nantucket is shown as single-family residential (low density).

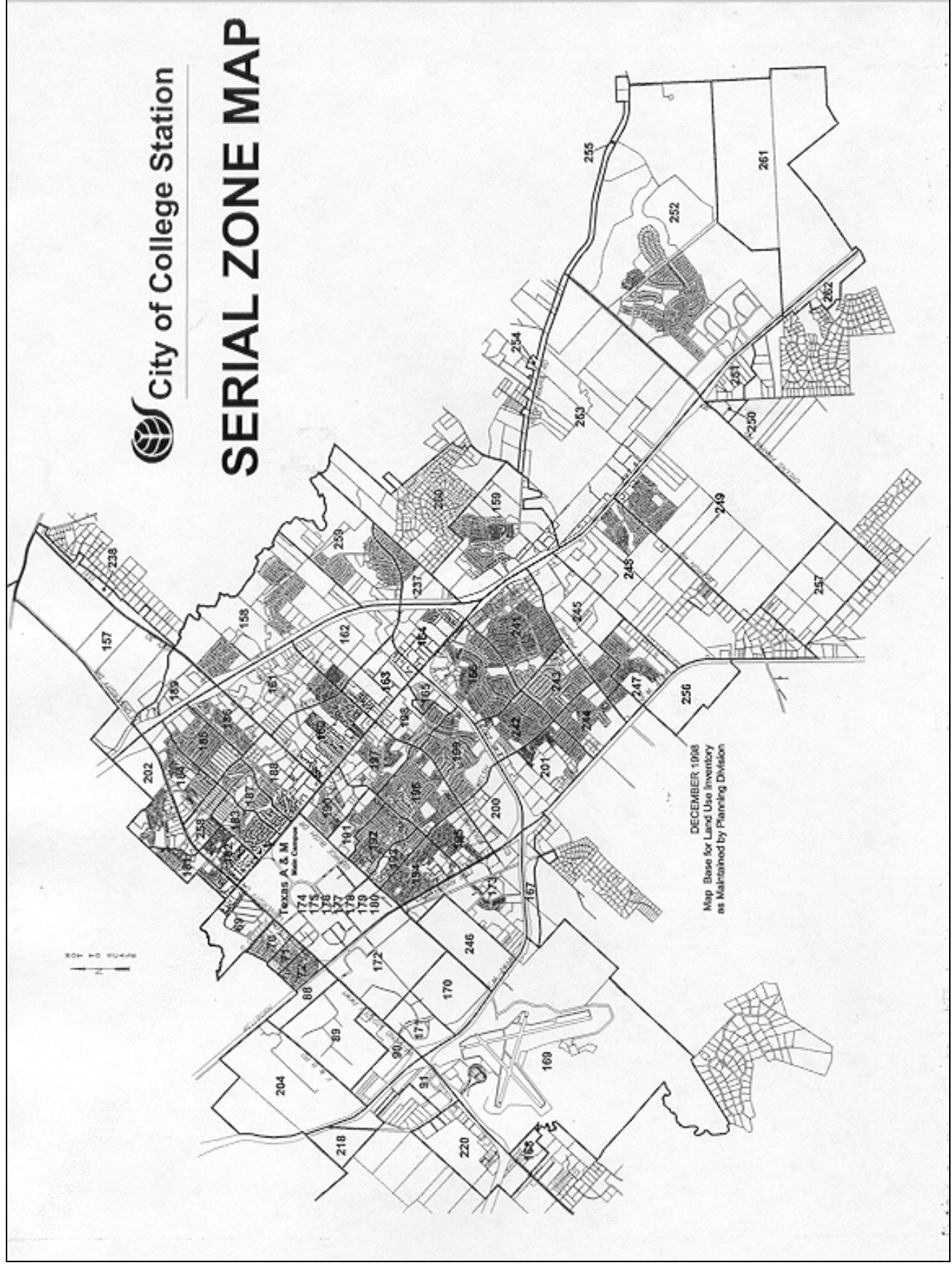
The type of land uses that are existing or planned for an area drive the roadway capacity and access needs for that area.

Medium density refers to 3-6 dwelling units per acre and **low density** refers to 1/3 - 2 dwelling units per acre.

The remaining parcels in the study area not shown as floodplain are generally anticipated for rural development. Such areas are beyond the City's wastewater "sewershed". The sewershed refers to that area, which can be effectively, economically and feasibly served with wastewater infrastructure by the City of College Station without the need for additional pumping stations and/or treatment facilities. Public subsidy of the extension of infrastructure beyond this point is generally considered unwise, contributing to increasingly speculative real estate development, "leapfrog" development patterns and advancing premature needs for thoroughfare development.

Measuring land use change was accomplished by identifying the approximate percentages of land use by category within the Study Area using Serial Zones. Serial Zones (SZ) relevant to the Study Area include 248, 249, 250, 251, 257, and 262.

Figure 1:
Serial Zones
City of College Station, Texas



SZ 248 is north of the Study Area but represents a considerable impact to this thoroughfare planning effort and serves as a barometer for future growth in the Study Area. The table shows that significant growth has occurred in the period from 1996-2001. Vacant land potentially available for future development represented 78 percent of the total acres in this zone in 1996.

Table 1:
Land Use Inventory – Serial Zone 248

Year	Total Acres	ROW	Public Acres	Other Acres	Park Acres	Vacant Acres	Single-Family Acres	Multi-Family Acres	Commercial Acres	Industrial Acres
2001	774.39	65.10	49	0	0	375.44	240.05	0	225.54	0
2000	774.39	56.38	49	0	0	430.22	198.24	0	20.74	0
1999	774.39	46.19	49	0	0	455.98	173.44	0	19.78	0
1998	774.39	39.89	49	0	0	515.05	150.67	0	19.78	0
1997	774.39	39.89	0	0	0	585.66	129.06	0	19.78	0
1996	774.39	39.89	0	0	0	607.21	113.26	0	14.03	0

Much of the vacant land was improved for single-family dwellings and commercial development by the end of 2001. Acreage used for commercial purposes has increased 1508%, single-family purposes have increased 112% and vacant land has decreased by 38% since 1996. At this time, the data for 2002 permits have not been tabulated, but portions of this zone continue to incur new single-family residential development, including Bridlegate Estates, Alexandria and Westfield Village as well as commercial development along Graham Road and the SH 6 frontage road. Land dedicated for public right-of-way nearly doubled during this period.

Future land use plan implications in this area will be shared by SZ 248 and SZ 249. College Station ISD has acquired a site proposed for an elementary school (Cypress Ridge Elementary) in SZ 248 between Graham Road and Barron Road and a high school site on the south side of Barron Road near the future intersection of Victoria Avenue. While construction of these facilities will not likely coincide with the other, each new school should be anticipated to serve as a magnet to attract additional residential development along the Barron Road corridor. Commercial development in proximity to the new high school and SH 40 interchange is also likely to occur.

Table 2:

Land Use Inventory – Serial Zone 249

Year	Total Acres	ROW	Public Acres	Other Acres	Park Acres	Vacant Acres	Single-Family Acres	Multi-Family Acres	Commercial Acres	Industrial Acres
2001	1652.99	81.67	1	0	4.35	1,457.48	115.13	0	3.26	0
2000	1652.99	58.09	1	0	0	1,500.47	95.72	0	3.26	0
1999	1652.99	52.57	1	0	0	1,501.57	94.62	0	3.26	0
1998	1652.99	49.36	1	0	0	1,517.54	81.86	0	3.26	0
1997	1652.99	49.36	1	0	0	1,525.65	73.90	0	3.11	0
1996	1652.99	43.84	1	0	0	1,542.97	62.07	0	3.11	0

SZ 249 lies between Barron and Greens Prairie roads, south of SZ 248. Land consumed by single-family residential development has nearly doubled since 1996 as sequential phases of Shenandoah, Castlegate, and Sweetwater have materialized. Commercial development has not maintained the pace of residential development, but the trend is sure to change with the construction of the proposed SH 40 corridor, continued residential development and improved thoroughfare connectivity. The comprehensive land use plan shows retail regional for the northwest corner of SH 6 at Greens Prairie Road (SH 40) in what is now referred to as the Crowley Tract.

Serial Zones 250, 251, and 257 are represented in the following three tables. None of these reflect any land use changes over the representative period; however, the data for 2002 remains to be tabulated. Also sure to impact these zones and geographic area is a recent City of College Station annexation package incorporating property between Greens Prairie and Arrington roads. The City does not monitor areas outside the City Limits by serial zone.

Table 3:

Land Use Inventory – Serial Zone 250

Year	Total Acres	ROW	Public Acres	Other Acres	Park Acres	Vacant Acres	Single-Family Acres	Multi-Family Acres	Commercial Acres	Industrial Acres
2001	22	2.47	0	0.5	0	9.03	10	0	0	0
2000	22	2.47	0	0.5	0	9.03	10	0	0	0
1999	22	2.47	0	0.5	0	9.03	10	0	0	0
1998	22	2.47	0	0.5	0	9.03	10	0	0	0
1997	22	2.47	0	0.5	0	9.03	10	0	0	0
1996	22	2.47	0	0.5	0	9.03	10	0	0	0

Table 4:

Land Use Inventory – Serial Zone 251

Year	Total Acres	ROW	Public Acres	Other Acres	Park Acres	Vacant Acres	Single-Family Acres	Multi-Family Acres	Commercial Acres	Industrial Acres
2001	141.77	31.77	10.40	0	0	82.15	12.65	0	3.00	2.40
2000	141.77	31.77	10.40	0	0	82.15	12.65	0	3.00	2.40
1999	141.77	31.77	10.40	0	0	82.15	12.65	0	3.00	2.40
1998	141.77	31.77	10.40	0	0	82.15	12.65	0	3.00	2.40
1997	141.77	31.77	10.40	0	0	82.15	12.65	0	3.00	2.40
1996	141.77	31.77	10.40	0	0	82.15	12.65	0	3.00	2.40

Table 5:

Land Use Inventory – Serial Zone 257

Year	Total Acres	ROW	Public Acres	Other Acres	Park Acres	Vacant Acres	Single-Family Acres	Multi-Family Acres	Commercial Acres	Industrial Acres
2001	576.33	2.02	0	0	0	553.31	21.00	0	0	0
2000	576.33	2.02	0	0	0	553.31	21.00	0	0	0
1999	576.33	2.02	0	0	0	553.31	21.00	0	0	0
1998	576.33	2.02	0	0	0	553.31	21.00	0	0	0
1997	576.33	2.02	0	0	0	553.31	21.00	0	0	0
1996	576.33	2.02	0	0	0	553.31	21.00	0	0	0

Data for Serial Zone 262 is shown in the table below. In this zone, new residential development is occurring in Southampton, although at a slow pace.

Table 6:

Land Use Inventory – Serial Zone 262

Year	Total Acres	ROW	Public Acres	Other Acres	Park Acres	Vacant Acres	Single-Family Acres	Multi-Family Acres	Commercial Acres	Industrial Acres
2001	88.63	31.79	0.00	0.00	0.00	54.32	2.52	0.00	0.00	0.00
2000	113.40	49.20	0.00	0.00	0.00	64.20	0.36	0.00	0.00	0.00
1999	113.40	47.60	0.00	0.00	0.00	65.80	0.00	0.00	0.00	0.00
1998	113.40	47.60	0.00	0.00	0.00	65.80	0.00	0.00	0.00	0.00
1997	113.40	47.60	0.00	0.00	0.00	65.80	0.00	0.00	0.00	0.00
1996	113.40	47.60	0.00	0.00	0.00	65.80	0.00	0.00	0.00	0.00

Housing and Population Characteristics. Supplementary to the land use inventory, evaluating and estimating housing units and population characteristics in the Study Area is helpful to the development of this update.

The housing and population trends are consistent with the aforementioned land use characteristics. Only Serial Zones 248 and 249 have experienced an increase in the number of dwelling units and population. Serial Zone 262 reflects a recent increase in dwelling units, but no population because this is a new development. The remaining zones have showed no changes in housing or estimated population during the period shown.

In Serial Zone 248, the number of mobile homes has remained constant, but single-family dwellings have increased substantially as a result of subdivision development in the area. Since 1996, the number of single-family dwellings has increased 252%, from 200 dwellings to 504 dwellings. Similarly, the estimated population in this zone has increased approximately 240%, from 403 to 966 persons.

In Serial Zone 249, the number of single-family dwellings has increased approximately 159% since 1996. The number of mobile homes, four, has remained the same. This represents a population increase of approximately 158%.

Table 7:

Housing & Population Characteristics – Serial Zone 248

Year	Single-Family Units	Duplex Units	Multi-Family Units	Mobile Homes	Mobile Home Spaces	Group Quarters Residents	Total Units	Estimated Population
2001	504	0	0	18	0	0	522	966
2000	361	0	0	18	0	0	379	701
1999	275	0	0	18	0	0	293	542
1998	220	0	0	18	0	0	238	441
1997	211	0	0	18	0	0	229	424
1996	200	0	0	18	0	0	218	403

Table 8:

Housing & Population Characteristics – Serial Zone 249

Year	Single-Family Units	Duplex Units	Multi-Family Units	Mobile Homes	Mobile Home Spaces	Group Quarters Residents	Total Units	Estimated Population
2001	413	0	0	4	0	0	417	772
2000	354	0	0	4	0	0	358	663
1999	349	0	0	4	0	0	353	653
1998	317	0	0	4	0	0	321	594
1997	317	0	0	4	0	0	321	594
1996	260	0	0	4	0	0	264	489

Table 9:

Housing & Population Characteristics – Serial Zone 250

Year	Single-Family Units	Duplex Units	Multi-Family Units	Mobile Homes	Mobile Home Spaces	Group Quarters Residents	Total Units	Estimated Population
2001	0	0	0	2	0	0	2	4
2000	0	0	0	2	0	0	2	4
1999	0	0	0	2	0	0	2	4
1998	0	0	0	2	0	0	2	4
1997	0	0	0	2	0	0	2	4
1996	0	0	0	2	0	0	2	4

Table 10:

Housing & Population Characteristics – Serial Zone 251

Year	Single-Family Units	Duplex Units	Multi-Family Units	Mobile Homes	Mobile Home Spaces	Group Quarters Residents	Total Units	Estimated Population
2001	11	0	3	0	0	0	14	26
2000	11	0	3	0	0	0	14	26
1999	11	0	3	0	0	0	14	26
1998	11	0	3	0	0	0	14	26
1997	11	0	3	0	0	0	14	26
1996	11	0	3	0	0	0	14	26

Table 11:

Housing & Population Characteristics – Serial Zone 257

Year	Single-Family Units	Duplex Units	Multi-Family Units	Mobile Homes	Mobile Home Spaces	Group Quarters Residents	Total Units	Estimated Population
2001	7	0	0	7	0	0	14	30
2000	7	0	0	7	0	0	14	30
1999	7	0	0	7	0	0	14	30
1998	7	0	0	7	0	0	14	30
1997	7	0	0	7	0	0	14	30
1996	7	0	0	7	0	0	14	30

Table 12:

Housing & Population Characteristics – Serial Zone 262

Year	Single-Family Units	Duplex Units	Multi-Family Units	Mobile Homes	Mobile Home Spaces	Group Quarters Residents	Total Units	Estimated Population
2001	7	0	0	0	0	0	7	0
2000	1	0	0	0	0	0	1	0
1999	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0

Census 2000. Housing and population characteristics may also be considered using Block level data from the 2000 Census. The Census geography at this level corresponds more accurately to the boundaries of the original study area. According to the Census Bureau, the 2000 population was 2,926 in 959 households. This results in an average persons per household value of 2.87 versus 2.32 persons per household in College Station. The median age is 37.9 years. In the study area, there were 989 housing units as of March 2000. At this time, there was a three-percent vacancy rate. Approximately 91 percent of the occupied housing units are owner-occupied. As indicated by Tables 7-12 above, population in the area is increasing as new developments are platted and dwelling units are constructed.

Commercial/Industrial Square Footage Trends. As an indicator of traffic generation, it is helpful to evaluate the expansion/contraction of commercial and industrial uses. As shown in the table below, SZ 248 has tripled in commercial square footage since 1996. The other zones are smaller, and are likely to show sizeable increases as the number of dwelling units in each of the areas continues to increase. As jobs and other economic activities occur in these areas, connectivity will become increasingly vital to the effectiveness of the thoroughfare plan in this area. However, the plan still recognizes the major employment nodes for most of the population in the study area will remain at TAMU and the College Station business centers located east of SH 6.

Table 13:

Commercial Square Footage by Serial Zone, 1996-2001

Serial Zone	1996	1997	1998	1999	2000	2001
248	13,281	26,714	30,714	30,714	32,904	46,442
249	6,000	6,000	11,000	13,180	13,180	13,180
250	0	0	0	0	0	0
251	6,000	6,000	6,000	6,000	6,000	6,000
257	0	0	0	0	0	0
262	0	0	0	0	0	0

Serial Zone 248 also led the Study Area in industrial square footage. This development type is concentrated along Graham Road between Wellborn Road and Victoria Avenue.

Plan Concepts and Implications

Thoroughfare Plan concepts and philosophies as well as the existing plan are discussed in Section 5 of the College Station Comprehensive Plan to which this effort is considered an amendment.

In brief, the thoroughfare plan update proposed for the study area in south College Station is based on a system of functionally classified roadways designed to provide access to development, ensure connectivity and reasonable levels of service for these corridors into the future.

Figure 2: Thoroughfare Plan shows recommended thoroughfare development in the Study Area through 2025.

The development of this plan integrated the following factors:

Proposed alignment of SH 40

SH 40 is proposed to improve regional mobility, efficiently connecting SH 6 to FM 2154 (Wellborn Road) and possibly FM 2818 (Harvey Mitchell Parkway) in the future. The State anticipates that construction will begin in Fall 2003. The first phase will construct SH 40 from at the interchange of SH 6 and Greens Prairie Road, then curving around the west and northwest, and finally terminating at a point just south of Graham Road on Wellborn Road approximately 0.5 miles north of Barron Road. This alignment, which has been considered for some time, will separate two major developments that are being developed in the Study Area, namely Castlegate and the "Crowley Tract".

Furthermore, the proposed alignment will require a realignment of what is now Greens Prairie Road at its intersection with SH 40 west of SH 6. TxDOT's policy concerning interchange spacing recommends approximately one mile between interchanges. As indicated on the plan, grade separations are sought at five points, including:

- Intersection with SH 6
- Decatur Drive/Greens Prairie Road realignment
- Victoria Avenue
- Barron Road
- FM 2154 (Wellborn Road)

The first phase of SH 40 will function as frontage roads should/when the freeway section is constructed between them. It should be noted that the grade separations will not be constructed with the first phase of SH 40 construction.

Proximity to Union Pacific (UP) Railroad

In the Study Area, the Union Pacific Railroad parallels the west side of FM 2154 (Wellborn Road). The combination of the rail line and a state corridor create an edge for the area but also result in connectivity issues if not addressed adequately. Recently, the Bryan/College Station Metropolitan Planning Organization (MPO) authorized the "Local Rail Economic Feasibility and Location Study" (2002) which, among other issues, evaluated the frequency of grade crossings and their existing and anticipated treatments along the Union Pacific Railroad/Wellborn Road. This study recommended establishing/maintaining rail crossings at four locations, including:

- Capstone Drive
- Butte Road
- South Dowling Road near Wellborn
- In the bend near IG&N Road/Stousland Road

Integration of other/alternative transportation modes

According to the Comprehensive Plan:

“College Station should balance the development of all modes of transportation to assure the fast, convenient, efficient and safe movement of people and good to, from, and within the community while continuing to protect the integrity of neighborhoods.”

Bike and Pedestrian

In accordance with the Transportation Goal above, the City of College Station recently updated the Bikeway and Pedestrian Master Plan. Together they are considered part and parcel of the Thoroughfare Plan.

Although rural in character, the plan projected the extension of bikeways into much of the study area for this thoroughfare plan update with bike routes along the following corridors:

- Wellborn Road
- Greens Prairie Road
- SH 40
- Victoria Avenue (south of SH 40)
- Arrington Road
- Unnamed arterial

Bike Lanes are proposed along Barron Road, Victoria Avenue (north of SH 40) and Decatur Drive. In support of the Greenways Plan, shared bike/pedestrian paths are also proposed along the Lick Creek and Spring Creek greenways. Each bikeway subtype acts to compliment the thoroughfare plan offering safe and direct routes to various nodes such as schools (proposed high school), parks and employment centers (Business Center at College Station).

Transit

Over time, the recent annexation by the City of College Station will enhance the desirability/feasibility of this area for development, particularly suburban residential development. Due to its isolated proximity to TAMU and significant transit serviced commercial/employment centers, it is unlikely this area will be included for future transit routes by either the Texas A&M University Bus Service or The District.

Public Participation & Process

Staff and members of the Planning & Zoning Commission subcommittee met intermittently during the early phases of the planning process to identify issues and develop and evaluate thoroughfare plan proposals. Meetings were held as follows:

- October 9, 2002
- November 19, 2002
- January 21, 2003

A property owners' meeting was held February 18, 2003 at the College Station Utility Service Center on Graham Road. Approximately 850 property owners were notified using GIS to query property owner information furnished by the Brazos County Appraisal District. The College Station Neighborhood Services office also initiated contact with known HOAs in the Study Area, including Nantucket, Woodlake and Castlegate. Sign-in sheets and a “pin map” were used to register property owners and gauge the distribution of attendees. Approximately 150 persons were in

attendance. Staff presented draft thoroughfare, land use and bikeway plans for the public input and received a tremendous amount of input.

As a result of the input received at the property owners' meeting, staff and members of the subcommittee facilitated two small group meetings to address specific concerns and issues. The first small group meeting was held at City Hall on February 26th with representatives of the Woodlake Preservation Association. The second such meeting was held on March 5th at City Hall with representatives of the Nantucket Preservation Association. Staff again revised the proposed thoroughfare plan based on comments received.

At the request of property owners, another public input opportunity was facilitated through an Open House held in the City Hall Training Room on March 17th. The Open House was arranged in such a way that interested persons could view the revised plan and share comments with staff on a come-and-go basis. Approximately 75 people attended the one-hour meeting.

The final public input opportunities are before the Planning & Zoning Commission and City Council on March 20th and April 10th, respectively.

Proposed Plans

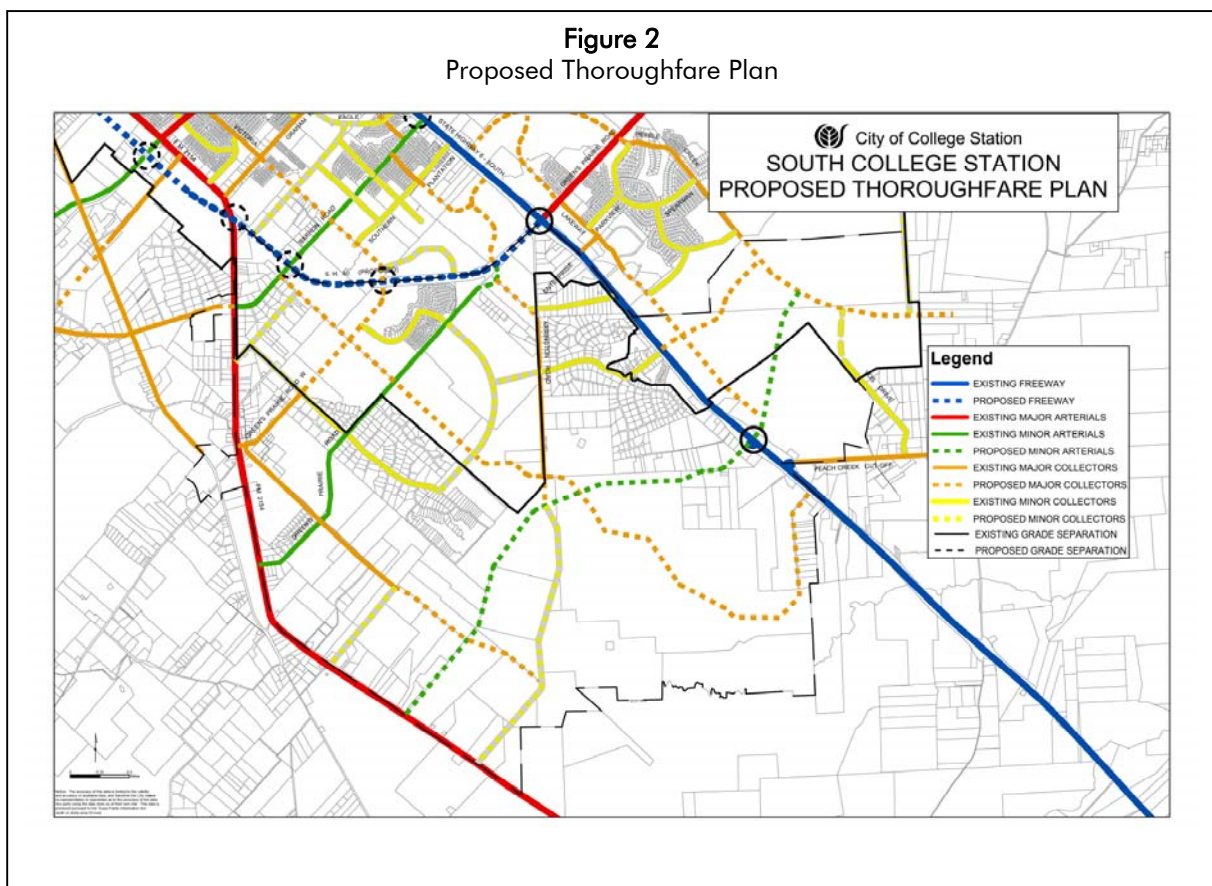


Figure 3
Proposed Bikeway and Pedestrian Master Plan

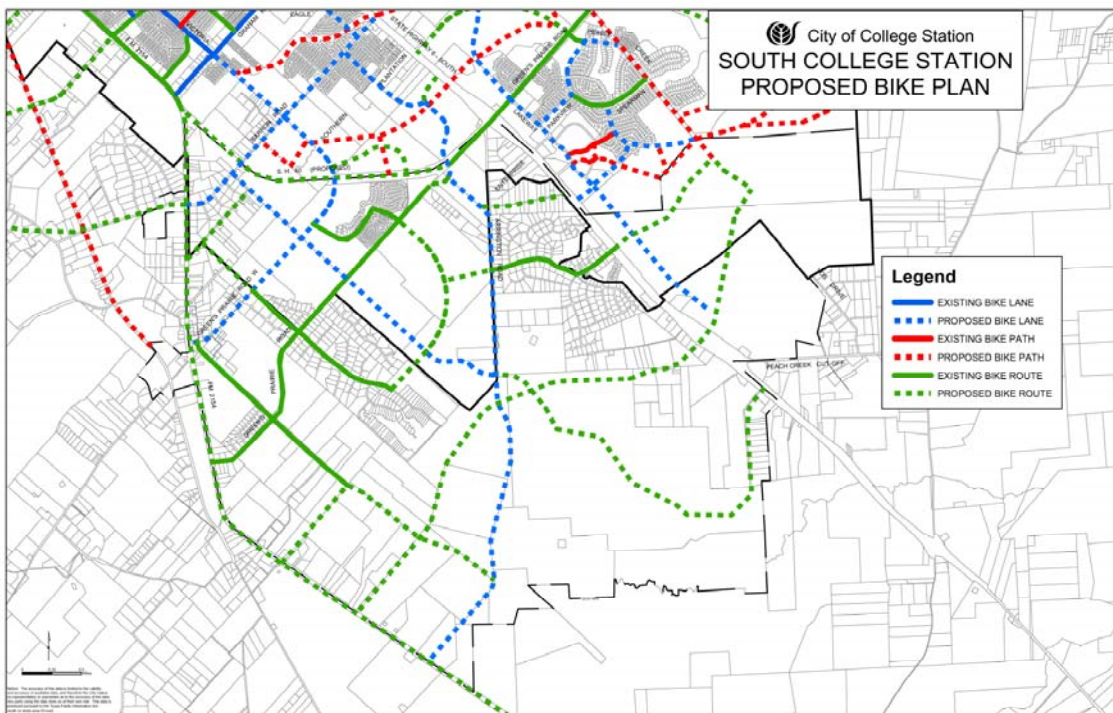
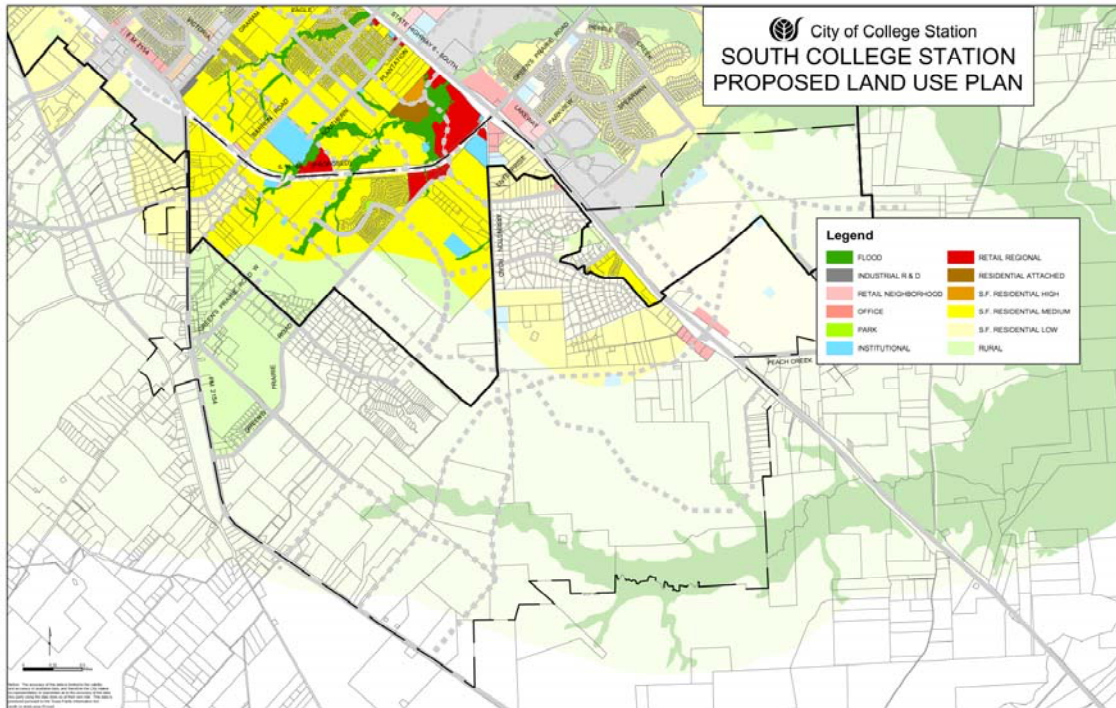


Figure 4
Proposed Land Use Plan



Appendix A: TxDOT Projects

The Texas Department of Transportation (TxDOT) has a number of transportation improvement projects identified for corridors affecting the Study Area.

State Highway 40 (SH 40)

TxDOT is currently developing a project on new location to connect SH 6, at Greens Prairie Road, to FM 2154 near Graham Road. The planned facility is a four-lane roadway with a median separating each direction of traffic. Public meetings were held to assist in determining a preferred alignment and planning the preliminary roadway layout, now under detailed design. Right-of-way acquisition is currently underway for this project and construction is anticipated to begin in fall 2003.

SH 6 (Earl Rudder Freeway) Ramp / Frontage Road Improvements

TxDOT is currently developing a project to improve the existing intersection of SH 6 with Rock Prairie Road. The improvements will include alteration of the frontage roads between Deacon Drive and Greens Prairie Road, adjustment or addition of access ramps, and conversion of the frontage roads to one-way operation. Two public meetings were held to assist in determining a preferred improvement.

No new right-of-way acquisition is required for this project and construction is anticipated to begin in 2004 upon completion of the extension of Longmire Drive between Birmingham and Barron Road.

FM 2154 (Wellborn Road)

TxDOT is currently developing a project to improve the existing two-lane roadway, between FM 2818 and the new SH 40, to a four-lane roadway. This facility will include a median separating each direction of traffic. Two public meetings were held to assist in determining a preferred alignment and planning the preliminary roadway layout. No right-of-way acquisition has begun for this project and construction is not anticipated to begin for 3 to 5 years.

Figure 5:
SH 40 (Proposed)

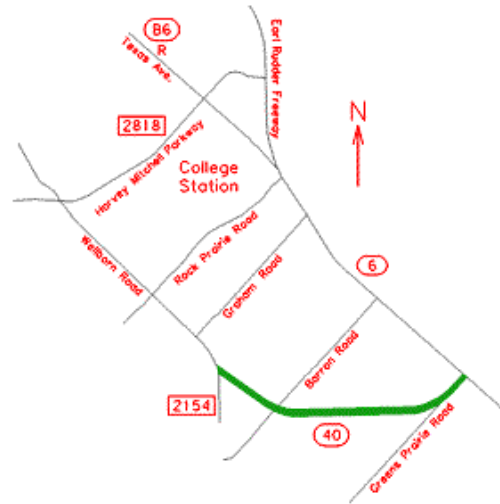
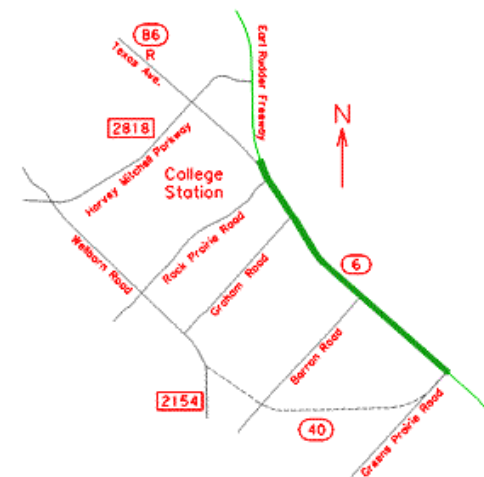


Figure 6:
SH 6 Ramp/Frontage Road Improvements



Source: TxDOT Website

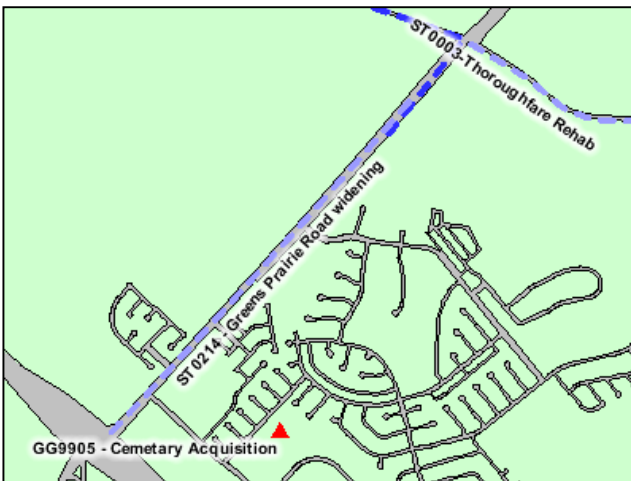
Appendix B: City of College Station Street Projects

The City of College Station Capital Improvement Plan (CIP) is reviewed and adopted annually to identify potential projects and recommend specific projects for the upcoming fiscal year budget. Current CIP projects that affect the Study Area are identified as follows:



Longmire extension

In Phase I, Longmire will be extended from the planned end past the L.O. Ball Subdivision at Birmingham Road to the intersection of Graham Road. In Phase II, will continue construction of Longmire from Graham Road south to the current termination north of Barron Road.



Greens Prairie Road

Widening of Greens Prairie Road to 4 lane urban section with median from SH6 east to Lick Creek Bridge



Barron Road

Widening between SH 6 and Wellborn Road and includes establishing the roadway alignment, additional right-of-way required and land acquisition. Roadway would require a minimum 90-foot right-of-way width as a minor arterial.

Design of an interchange for the intersection of Barron Road with SH 6.
